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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,156

04/10/2007

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24043-11986

1688

758 7590 04/12/2010

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EXAMINER

FRY, MATTHEW A

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

04/12/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,156	Applicant(s) FRYER ET AL.	
	Examiner MATTHEW A. FRY	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 8-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/9/07 and 8/18/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group 1: claims 1-7 and 13 in the reply filed on 2/18/10 is acknowledged. The traversal is on the ground(s) that the common features are not known in the prior art (Remarks page 2) and that groups 1 and 2 do not have separate special technical features (Remarks page 3). This is not found persuasive because the features in common, listed in claim 1, are known in the prior art (Pallakoff) as discussed below. Additionally, the first group lists a special technical feature (shared front electrode, claim 4) which is not in group 2, and group 2 contains a special technical feature (detecting time to charge capacitor at 2 or more rates; claim 9) that is not in group 1.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "display comprising a front electrode...in which one of the pair of electrodes of the capacitance sensor is the front electrode" (claim 4 and 13), "electrode forming a case of the display" (claim 5 and 13), "an electrode forming a power terminal of a circuit arranged to drive and control the display" (claim 5 and 13), and "means to effect activation" (claim 7 and 13) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2629

5. Claim 7 recites the limitation "a diode is provided to protect the capacitance sensor or means to effect activation from a voltage present at the front electrode." It is unclear what is intended by "means to effect activation." This could refer to activation of the display or the sensor. It is also unclear if the final limitation, "from a voltage present at the front electrode" refers to the diode or only the means to effect activation.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Pallakoff (US 2005/0012723).

8. In regards to claim 1, Pallakoff teaches a display of the type having both an activated, "on", state and an inactivated, "off", state, and being switchable between the two, which display incorporates a capacitance sensor, able to detect the near presence of a user, together with circuitry arranged to utilize the output of this sensor to effect activation of the display accordingly (see ¶ 86, 99, 261). Paragraph 86 discusses detecting when a user touches the display. The Examiner considers this to detect the

Art Unit: 2629

presence of the user. Pallakoff does not explicitly disclose circuitry, but this is inherently included in order to achieve the goals Pallakoff discloses in Paragraph 261.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pallakoff (US 2005/0012723) in view of Siwinski et al (US 2002/0171610).

11. In regards to claim 2, Pallakoff teaches a display according to claim 1, but does not explicitly teach the display comprises an electroluminescent display. Pallakoff does not discuss what kind of display is preferred. Siwinski teaches an Electroluminescent touch screen (Abstract and figure 9). Electroluminescent touch screens are well known in the art, and thus it would have been obvious to one of ordinary skill in the art to modify Pallakoff with Siwinski such that Pallakoff's display is an Electroluminescent display.

12. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pallakoff (US 2005/0012723) in view of Siwinski et al (US 2002/0171610) and further in view of Inoue et al (US 5,929,834).

Art Unit: 2629

13. In regards to claim 3, Pallakoff discloses a display according to claim 1, but does not explicitly disclose electrodes. However, Inoue teaches a capacitance sensor comprising a pair of spaced electrodes and electronics arranged to measure the capacitance of the pair and to output a signal in dependence thereon (see figures 2 and 4). A capacitance sensor is well known in the art in which the capacitance sensor comprises a pair of spaced electrodes and electronics arranged to measure the capacitance of the pair and to output a signal in dependence thereon. Because it is common knowledge, it would have been obvious to one of ordinary skill in the art to modify Pallakoff, as modified, with Inoue to have opposing electrodes in a capacitance sensor and support circuitry which measures capacitance.

14. In regards to claim 4, Pallakoff as modified discloses a display according to claim 2, a front electrode arranged to activate light-emitting areas of the display, and in which one of the pair of electrodes of the capacitance sensor is the front electrode (see Inoue figure 2; Col 3, lines 5-45).

The sharing of electrodes is commonly known in the art and therefor it would have been obvious to one of ordinary skill in the art to modify Pallakoff, as modified, with Inoue's shared electrodes in order to reduce cost and thickness of a touch screen display.

15. Claims 5-6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pallakoff (US 2005/0012723) in view of Siwinski et al (US 2002/0171610) and in

Art Unit: 2629

view of Inoue et al (US 5,929,834) and further in view of Gerpheide et al (US 5,565,658).

16. In regards to claim 5, Pallakoff, as modified, discloses a display according to claim 4, but does not explicitly teach the other of the pair of electrodes forms one of a case of the display and a power terminal of a circuit arranged to drive and control the display. Gerpheide teaches a power terminal (ground) formed on an electrode of a capacitor, in order to create a charge to be stored in the capacitor (see figures 2b, 6c and 6d; Col 7, lines 47-56). It would have been obvious to one of ordinary skill in the art to modify Pallakoff as modified, with Gerpheide such that one of the electrodes act as a power terminal as it is typical in the use of capacitors and is well known in the art.

17. In regards to claim 6, Pallakoff, as modified, discloses a display according to claim 5 in which the power terminal is a ground terminal (see claim 5 explanation).

18. In regards to claim 13, Pallakoff, as modified, discloses a electroluminescent display of the type having both an activated, "on", state and an inactivated, "off", state, and which is arranged to be switched between the two states, in which the display incorporates a capacitance sensor comprising a pair of spaced electrodes and electronics arranged to measure the capacitance of the pair and to output a signal in dependence thereon, wherein one of the pair of electrodes is a front electrode arranged to activate light-emitting areas of the electroluminescent display and the other electrode of the pair forms one of a case of the display and a power terminal of a circuit arranged to drive and control the display, the electronics being further arranged to process the signal and to determine the near presence of a user and further to effect activation of

Art Unit: 2629

the display accordingly in dependence of the presence of the user (see Pallakoff ¶ 86, 99, 261; Inoue figure 2; Col 3, lines 5-45; claim 2-6 explanations above).

19. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pallakoff (US 2005/0012723) in view of Siwinski et al (US 2002/0171610) and in view of Inoue et al (US 5,929,834) and further in view of Gremm (US 2003/0001223).

20. In regards to claim 7, Pallakoff discloses a display according to claim 4 but doesn't teach a diode. Gremm teaches a diode to protect the capacitance sensor or means to effect activation from a voltage present at the front electrode (figure 2).

Diodes are well known in the art and are commonly used in circuits to prevent countercurrent. Therefore it would have been obvious to one of ordinary skill in the art to modify Pallakoff as modified with Gremm in order to provide a diode to protect the capacitance sensor

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW A. FRY whose telephone number is (571) 270-7355. The examiner can normally be reached on Monday thru Friday, 8:00 AM to 5:00 PM, alternate Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bipin Shalwala/

Supervisory Patent Examiner, Art Unit 2629

/MATTHEW A FRY/

Examiner, Art Unit 2629